

## ***Preparing to record***

AR-03-1189

## Setting up for recording

Before recording can begin, you must set the recording parameters from the Audio Event Editor.

(For more information on setting synchronization parameters, see the manual *Studio Operations*.)

## Recording parameters

The Project Manager in the Show Project mode displays the recording parameter in the middle of each display.

<b>Status</b>	Tracks are made available for recording by setting their Status.
	<b>Safe</b> The track cannot be recorded on.
	<b>Ready</b> The track is ready for recording.
<b>Mode</b>	Each track must be placed into an input/output Mode.
	<b>Repro</b> Playback mode. You hear what is coming through the assigned outputs. Playback is from the disk. If you record in this mode, you do not hear the inputs.
	<b>Input</b> Record mode. You hear the signal entering through the assigned input. If you try to play back in this mode, you cannot hear what is on the track.
	<b>Auto</b> The track is in Repro during playback and Input during recording and while stopped.
	<b>CuePB</b> Playback mode for cues. The track is in CuePB during playback and Input during recording. When you play back in this mode, you only hear triggered cues. This is the playback mode for cues placed in a sequence.

## *Recording parameters (con't)*

**Inputs** Each track can have an assigned input source and channel (left and right columns under Input). You can assign a single input to more than one track, but only one of these tracks can be recorded at a time.

**STM** Signal derived from sampled live audio via the analog-to-digital converter of the STM module on channels 1A–4D.

**DIG** Signal transferred between a digital source and Direct-to-Disk via the UDIO module on channels 1 or 2.

**TRK** Signal bounced from on one Direct-to-Disk track to another on channels 1–16 tracks.

**OUT** Signal bounced from a cuelist to Direct-to-Disk tracks on channels 1–16 outputs.

**dB** The gain of each track input in decibels. The gain setting can be between -3 and +28 dB; 0 dB equals unity gain.

*(continued next page)*

### ***Setting up for recording (con't)***

### ***Recording parameters (con't)***

- |               |   |
|---------------|---|
| <b>Out</b>    | Route Direct-to-Disk tracks to Direct-to-Disk outputs. Only one track at a time can be routed through an output.  |
| <b>Volume</b> | The playback volume of each track. Any value from 0–100 percent can be entered.   |
| <b>Pan</b>    | The playback placement of the track in the stereo pan between the left and right outputs for each track and between the left and right composite outputs. A value of -50 places the signal on the left; a value of +50 places it on the right. A zero value places the signal in the middle, while intermediate values place the signal anywhere in the stereo pan. |

## *Setting the recording parameters*

You are now ready to set the recording parameters for the track on which you want to record.

1. *Select the recording mode.* Select the Mode column and step to either Input or Auto. (To set all tracks to the same mode, click one of the ALL command selections at the bottom of the panel.)
2. *Select the input source.* Select the left Input column and step to the appropriate input source.
3. *Select the input channel.* Select the right Input column and step to the appropriate input channel.
4. *Set the gain.* Select the dB column and enter a gain value between -3.0 and +28.0, if desired.
5. *Route the track to an output.* By default, each track is assigned to an output. To assign a different output, select the Out column and enter the number of the Direct-to-Disk output.
6. *Set the output volume.* Select the Vol column of the selected output and enter a value between 0–100.
7. *Set the output pan.* Select the Pan column of the selected output and enter a value from -50 to +50.
8. *Arm the track.* Select the Status column and step to READY.

If you are ready to record, proceed to the section "Recording." Otherwise, additional recording information is given in the remainder of this section.

## ***Reconfiguring tracks***

You can reconfigure the normal track setup and either double the maximum recording time per track (while cutting in half the number of tracks) or double the number of tracks available (while cutting in half the recording time per track).

(For information on loading projects with different configurations, see the section "Storing and recalling projects, tracks and cues.")

## ***Reconfiguring for standard and longer track time***

In the standard track configuration, each hard drive installed in your Direct-to-Disk provides recording time for two tracks. You can reconfigure your system for one track per drive from the Project Directory. Recording time on all odd-numbered tracks is doubled; even-numbered tracks become unavailable.

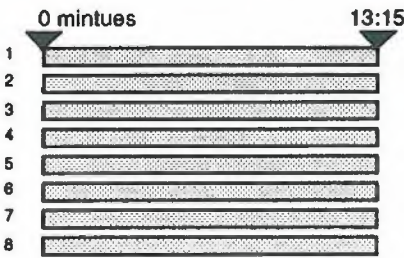
**Warning:** All projects are erased when you reconfigure for long tracks. Make sure all projects are backed up to tape before beginning this procedure.

1. Select the Project Directory from the Main Menu.
2. Select the Erase All command.
3. Type **erase** if you want to erase all projects and leave the system in the standard configuration.

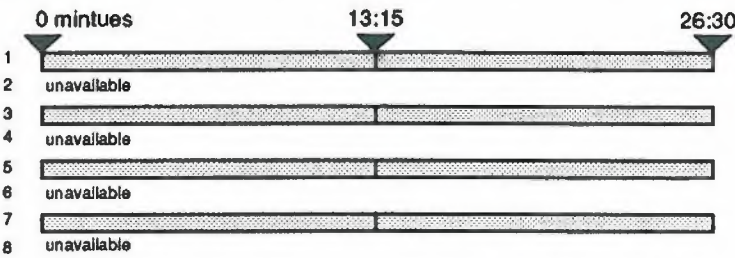
OR

Type **erase 1** if you want to erase all projects and reconfigure for one track per drive.

STANDARD CONFIGURATION



CONFIGURATION FOR MAXIMUM RECORDING TIME



*Standard and  
maximum track  
configuration*



## ***Reconfiguring tracks (con't)***

### ***Reconfiguring for track expansion***

With the track expansion option installed, each hard drive holds four tracks instead of the standard two. The result is twice as many tracks are available with half as much recording time per track. Recording is limited to sampling rates of 50 kHz or less.

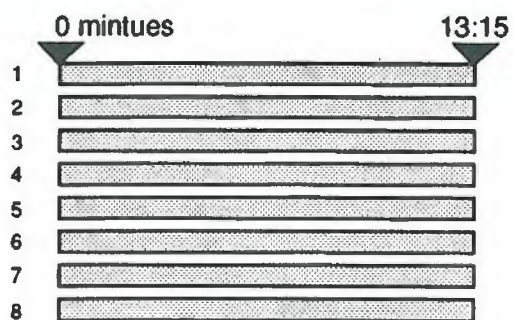
In order to take advantage of this option, you must have additional Direct-to-Disk voices installed. An upgraded meter bridge is also required. The track expansion option only works on systems with four or fewer drives (SCSI ports) and the drives must be Wren IV or later.

**Warning:** All projects are erased when you reconfigure for expanded tracks. Make sure all projects are backed up to tape before beginning this procedure.

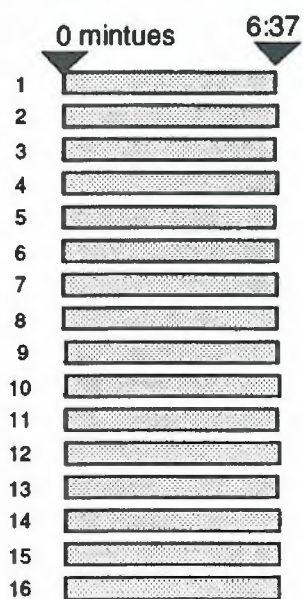
1. Select the Project Directory from the Main Menu.
2. Select the Erase All command.
3. Type **erase 4** if you want to erase all projects and leave the system in the expanded configuration.



## STANDARD CONFIGURATION

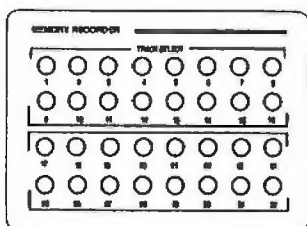


## EXPANDED CONFIGURATION



## ***Using the keyboard control panel***

If you have a Synclavier keyboard, certain Direct-to-Disk operations can be performed from keyboard control panel. (For more information on using the keyboard control panel and the VK Panel with the Direct-to-Disk, see the manuals *Sequence Editing from the Keyboard* and *Introduction*.)



***track select buttons  
panel 3***

## ***Assigning Direct-to-Disk tracks to the keyboard control panel***

Direct-to-Disk tracks are assigned by default to Track Select buttons 25 through 32. You can assign them to any other bank of eight Track Select buttons using the Track Display. Once assigned, you can arm or disarm the tracks from the keyboard control panel one by one or in groups.

1. Select the Track Display from the Main Menu.
2. Click the Button column on the far left side of the display.
3. Press the space bar until the Direct-to-Disk tracks are assigned to the desired bank of Track Select buttons.

## The Track Display

**RECORD** **START** **STOP** **CONT** **REW** **FFWD**

SAMPLE

OFF

IN

OUT

BOUNCE

**TRACK DISPLAY** ▼ 01:23:13.11.25  
 Digital Transfer

Project: Commercial  
 Crossfade: 5 ms

Locked:

Rate: 50.0 kHz

Start: 00 End: 12:00  
 Avail: 12:00 Used: 6:32

TRACKS										OUTPUTS			
Butn	No.	Track Title	Status	Mode	Used	Input	dB	Out		No.	Vol	Pan	DDT
(25)	1.	Vocals	Safe	Auto	3:32	STM	1A	0	1	1.	100.0	50	2
(26)	2.	Voiceover	Safe	Auto	5:00	STM	1B	0	2	2.	100.0	-50	
(27)	3.	Music cues #1	Safe	Auto	5:43	OUT	2	0	3	3.	100.0	50	
(28)	4.	Music cues #2	Safe	Auto	6:32	TRK	3	0	4	4.	100.0	-50	
(29)	5.	Effects	Ready	Input	1:13	DIG	1	0	5	5.	100.0	50	
(30)	6.		Safe	Auto	:00	STM		0	6	6.	100.0	50	
(31)	7.		Safe	Auto	:00	STM		0	7	7.	100.0	50	
(32)	8.		Safe	Auto	:00			0	8	8.	100.0	-50	
	9.		Unavail										
	10.		Unavail										
	11.		Unavail										
	12.		Unavail										
	13.		Unavail										
	14.		Unavail										
	15.		Unavail										
	16.		Unavail										

^A Backup Track  
 ^B Load Track

^C Erase Track  
 ^D Enter Fade

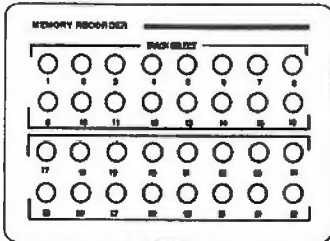
^U Unlock  
 ^V Lock

^W All Repro  
 ^X All Input

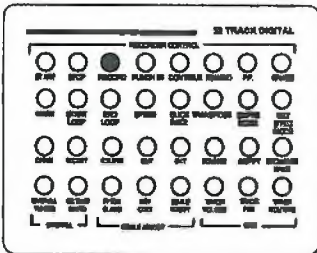
^Y All Auto  
 ^Z All Safe

Current Catalog W1: WORK

## Using the keyboard control panel (con't)



track select buttons  
panel 3



record button  
panel 2

## Arming tracks

Direct-to-Disk tracks can be armed and disarmed from the keyboard control panel.

1. On the keyboard control panel, press and hold the Track Select button of the Direct-to-Disk tracks you want to arm or disarm.
2. Press the RECORD button on the keyboard control panel.

If the track status is Safe, it changes to Ready. The Track Select button on the keyboard control panel begins blinking, and the display window shows

\* READY FOR \*  
\* LIVE RECORDING \*

If the track status is Ready, it changes to Safe and the button is no longer lighted.

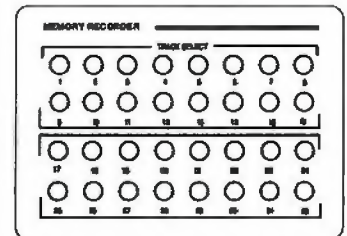
## *Soloing tracks for monitoring*

You can monitor Direct-to-Disk tracks while recording by soloing them from the keyboard control panel.

- Press the appropriate Track Select buttons on the keyboard control panel.

Tracks that are lit are audible during recording.  
Tracks that are not lit are muted.

Recording takes place on the armed track. The armed Track Select button blinks.



*track select buttons  
panel 3*

## **Synchronization**

You can synchronize recording and playback to several different time formats.

### ***Setting synchronization parameters***

You use the Synchronization and Time Control panel of the Audio Event Editor to set the appropriate synchronization parameters. Times can be displayed in SMPTE, Beats, Measures:Beats, Seconds, Minutes:Seconds and Feet:Frames.

Time code can be received, generated and displayed in 30-, 25-, 24- and Drop-frame mode. Systems which contain the VITC option can accurately track the output of a VITC reader or other device which can receive a signal and convert it to longitudinal time code.

A SMPTE offset, (the time at which the sequence starts) can be set from the Synchronization and Time Control panel or from the Selection panel. A Display offset, used to display time different than that entering the system, can also be set from here.

For more information on setting up synchronized recording and playback, see the section "Synchronizing to film and video" in the *Studio Operations* manual.

## The Synchronization and Time Control panel

Display Time in	Measures:Beats	SMPTE Out:	<input checked="" type="checkbox"/> 00:00:00:00.00	To Frame	Drop Frame	To Frame	24 Frame	
Synchronization:	INTERNAL	Click Track	OFF 120.00 Beats/Min	Beats Per Measure:	4	Speed:	1.000	
Set Display Offset	Configure SMPTE offset	Configure Event Time	Generate SMPTE					



## ***Default settings***

You can specify and save default values for some items on the Project Manager, Record Control and Synchronization and Time Control panels.

## ***Setting default values***

You can specify the default values for the following parameters.

### **Project Manager panel**

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Rate	1–100 kHz
Input	STM (1A–4D), OUT (1–16), TRK (1–16), DIG (1, 2)
Out	1–16
DDT	1 or 2

### **Record Control panel**

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Mode	Punch In, Allocate, Cue Lock
Trig	Manual, Sequencer, PolyXfer, TSM
Rec	Single, Repeat

### **Synchronization and Time Control panel**

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Display Time In	SMPTE, Feet:Frames, Seconds, Minutes:Seconds, Beats, Measures:Beats
SMPTE Offset	00:00:00:00.00–23:59:59:29.79
SMPTE format	30-, 25-, 24- and Drop-frame
Frame rate	35 mm, 16 mm, and 30-, 25-, 24-fps

## *Saving default values*

Once you have entered the new parameters, you can save them as the new default settings.

1. Click the WRITE button located at the top right above the Selection panel.
2. Press and hold the trackball on [SCREEN to W0:] in the dialog while you repeatedly press the Spacebar. Each time you press the Spacebar, the desired source and destination pair changes.
  - SCREEN to W0: Current screen settings are saved in a system file (:system:.SINF-7) on your Winchester)
  - SCREEN to F0: Current screen settings are saved in a system file on the disk in the floppy drive.
  - F0: to W0: Settings already saved on the floppy disk are copied to the system file on your Winchester and replace the current screen settings. The current screen settings are not saved.
3. Click [OK] to save default values from the selected source to the selected destination.

## ***Default settings (con't)***

### ***Restoring defaults***

Default values for the Record Control and Synchronization and Time Control panels are recalled to the screen automatically whenever you re-enter the RTP system or copy default settings to the Winchester from a floppy disk.

At any time, you can manually recall to the screen all default settings from the system file on the Winchester.

1. Click the button labeled READ at the top right of the screen.
2. Click [OK] in the dialog.

### *Creating a new project with default settings*

If you create a project using the New Proj command on the Project Manager panel or the New command on the Project Directory, the default settings are recalled.

However, if you use the scroll arrows on the Project Manager to locate and create a new project, the default settings are not recalled automatically. You can always recall them manually, as described previously.

For more information on creating a new project, see the section "Managing projects."

## ***Erasing tracks***

You can erase one or more Direct-to-Disk tracks in a project or all tracks in the entire system. When erasing a track, the audio on the track is deleted, but the track title and parameters are not affected.

## ***Erasing a track***

You can erase an individual track using the Project Manager.

1. Display the Project Manager panel in the Show Project mode.
2. Click the Erase command at the bottom of the panel.
3. Select the Track Title column of the track you want to erase.
4. Click [OK] in the dialog.

If you erase a Direct-to-Disk track that has cues on it, the cues are erased as well. They no longer appear in the Cue Directory.

If the erased track was part of a cue which contained audio from more than one track, then only the cue information from the erased track is deleted. The cue remains in the Cue Directory.

## ***Erasing all Direct-to-Disk tracks***

You can erase all tracks in one or more projects using the Project Manager.

1. Display the Project Manager panel in the Show All mode.
2. Click the **Erase Proj** command at the bottom of the panel.
3. Click in the tracks area of projects you want to erase.
4. Click [OK] in the dialog.

You can erase all tracks on all projects from the Project Manager panel.

1. Display the Project Manager panel in the Show All mode.
2. Click the **Erase All** command at the bottom of the panel.
3. Click [OK] in the dialog.

## **Monitoring tracks**

You can monitor Direct-to-Disk tracks while recording.

## **Monitoring tracks**

To monitor Direct-to-Disk tracks while recording, set them to the playback mode from the Project Manager. Any track set to Repro or Auto mode with an assigned output will play back during recording.

1. Select the track you want to monitor and set its Mode to Repro or Auto.
2. Select the Out column of the same track and enter the number of the Direct-to-Disk output, if it has not already been assigned.

Audio from the selected track plays back through the selected output during recording.